

A SMALL CAPTIVE STRONGYLOGNATHUS-TETRAMORIUM COLONY.—I described* a new *Strongylognathus* species taken by Captain Diver at Studland, Dorset, in 1935 in a nest of *Tetramorium caespitum*. On 23rd May, 1936, I joined Captain Diver with the intention of taking inhabitants from this colony (or others if found) to keep alive under observation. It was also hoped to find a female of the new species. This was not done, though the nest was carefully dug up—some larvae and pupae were taken, and the *Strongylognathus* ♂♂ were found only to be present in the proportion of 1-2% to the *Tetramorium* ♀♀. A certain number of the latter with 6 *Strongylognathus* ♂♂ were established in a plaster observation nest, and were kept under observation for a good many months. The pupae proved to be all *Tetramorium* ♀♀. The *Strongylognathus* ♂♂ moved about freely amongst their hosts, no notice, however, being taken of them. Most of the larvae disappeared, but a few pupated and proved to be *Strongylognathus* ♂♂. These were unfortunately killed and cut up before I could get at them. As there were no more larvae and no ♀ present, the *Strongylognathus* ♂♂ were killed and set for the cabinet, and the *Tetramorium* ♀♀ let loose in the garden.—HORACE DONISTHORPE.

METHYLATED SPIRIT AS A RELAXING AGENT.—Some years ago I published a short note (*Entomologist*, lxii, p. 284) on the use of methylated spirit as a relaxing agent and I mentioned it more briefly in a recent note on the Preservation of Heterocera in India (*Journ. Bomb. N.H. Soc.*, xxxviii, p. 634).

I have since found that it is not necessary to bring the insects into actual contact with the spirit and that the action is very quick if the specimens are exposed to the vapour from a mixture of spirit and water. It is not difficult to devise some sort of stage on which papered specimens can be placed, whilst pinned insects can be simply pinned to the top of the relaxing tin above the liquid.

This method avoids any matting of the hair on the thorax and abdomen, whilst it is almost as rapid, both in the actual relaxing and drying off, as my old method of damping the specimens with the spirit. Forty-eight hours is more than sufficient to relax even large insects and they will dry in about the same time.—D. G. SEVASTOPULO (F.R.E.S.), London, 3.viii.37.

A PRESERVATIVE FLUID FOR METALLIC PUPAE.—About a year ago, I made the accidental discovery that a saturated solution of bichloride of mercury (corrosive sublimate) in water, to which is added an equal volume of 95% alcohol, would preserve the brilliant golden pupae of the Danaid *Euploea core*, Cr., in their full beauty. I have pupae that have been preserved in this fluid for over a year and they are almost as bright as the day they were killed. I have never before been able to preserve the gold colour for even a few days.

The only other species that I have tried in this fluid is *Danaus limniace*, Cr., f. *mutina*, Fruhs., a very beautiful green pupa with large golden spots. This has not been a success, as the green pigment is soluble in alcohol, but the gold colour of the spots has been preserved.

It seems probable, therefore, that this solution will prove successful

**Ent. Mo. Mag.*, lxxvii, 111-16. T. figs. 1-7 (1936).

with all metallic pupae except those that have green or any other alcohol soluble pigment. The English species that seems most suited for a trial is the brilliant golden pupa of *Aglais urticae*, L.—ID.

EMIGRANT BUTTERFLIES.—It would be interesting to know if observers in England notice any difference in the numbers of *Vanessa (Pyrameis) cardui* in 1936 and 1937. Last winter was exceptionally mild, but this winter has been unusually severe in Iraq, and, I hear, in Egypt also. Perhaps this will diminish the stock that usually survives the winter in these regions, and thus diminish the number of larvae this coming spring; this would lessen the northward urge commonly attributed to successive broods finding, on hatching, their breeding-grounds crowded with the offspring of the first butterflies which oviposit in February and March. Was this species noted commonly in 1936 in England? In the plain of Iraq, I may add, the chief foodplant is *Malva parviflora*, L., on which the larva may be found in large numbers in March; it withers in April.—C. P. WILTSHIRE, Iraq. P.S.—From the English viewpoint, "Emigrant" ought to be "immigrant," I suppose. But I write from mine.

EUCHELIA JACOBÆAE AND RAGWORT.—Three years ago ragwort appeared in a large park in this district. Last year the plant had increased greatly, and this year ragwort has spread a yellow carpet over some hundreds of acres. *E. jacobæae*, the chief natural "control" of this weed, has been seen sporadically in the district for some years, but usually only single specimens, and, so far as I know, it has not been seen previously in the park in question.

This year the moth has appeared in profusion. Its larvae are smothering the ragwort at the east end of the park and are to be seen, in lessening numbers, for about a mile to the west. The plants are stripped bare of both leaves and flowers, and larvae are wandering to various low-growing plants some yards from the natural foodplant.

Whence have these moths come? None of the local entomologists has liberated ova or larvae, and indeed the profusion of the insect is too great to be accounted for by any artificial introduction. Like *Callimorpha dominula* the males of this species often fly in the daytime; the females begin to fly only at late dusk, and ovipositing is performed at night. Are there any records of mass movements of *E. jacobæae* by night? It would seem that a considerable swarm of female moths has come to the park from somewhere. Presumably when this insect has cleared off all the ragwort in a district the emerging moths migrate—if not to "fresh woods" at least to "pastures new." But I should like to know if there are any records of these mass movements. I use the term purposely because I have found twelve full-fed larvae on a single-stemmed plant; and since with most moths in the wild state only about one per cent. of ova laid results in an imago, and a female *E. jacobæae* does not lay 1200 eggs on a single plant, it would seem that this one plant had been visited by several females. Trade follows the flag; does *E. jacobæae* follow the ragwort?—P. B. M. ALLAN, Bishop's Stortford.

[*Euchelia*, Bdv. (1829), is the generic name of years. *Hypocrita*, Hb. (1806), is a *Tentamen* name and has been much used. And *Tyria*, Hb. (1822), is the more recent old name now advocated.—HY. J. T.]